

***NATIONAL WEATHER SERVICE
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)
TYPE: Official Product
DATE: June 04, 2003***

SURFACE ANALYSIS

Part 1 - Mission Connection

1. Product/Service Description:

The Surface Analysis is a graphical marine product that depicts surface weather features such as frontal boundaries, tropical cyclones, high and low pressure centers, and observational data including barometric pressure and wind barbs. The product is prepared by the Ocean Prediction Center (OPC), over the North Atlantic and Pacific Oceans north of 15 degrees north. The marine areas of responsibility (MAOR) for these products, the High Seas Zones, extends seaward from the coast and includes the Coastal Waters and Offshore Marine Zones.

2. Purpose/Intended Use:

The product is issued routinely four times per day to depict present marine conditions including any event-driven marine and tropical hazards occurring over the MAOR. This product is intended to provide information assisting in the protection of life and property, and enhancing the nations economy.

3. Audience:

The target audience for this product includes: ocean going vessels, barge operators, private maritime organizations, recreational mariners, commercial fishing vessels, and military and government agencies.

4. Presentation Format:

The product is made available in a graphical format.

5. Feedback Method:

Continuous feedback is available via an Internet page e-mail link to the program managers in the Marine and Coastal Weather Services and to managers of the OPC. Additional feedback on this product is obtained at Focus Group meetings, Boat Shows, and Customer Surveys.

Technical and policy questions, and comments for the Surface Analysis may be addressed to:

National Weather Service
Attn: Brian LaMarre W/OS21
Marine Program Manager
1325 East-West Highway, Room 13118
Silver Spring, MD 20910-3285

or e-mail questions and comments to: Brian.Lamarre@noaa.gov

Part 2 - Technical

1. **Format and Science Basis:**

The Surface Analysis product is disseminated in graphical format and contains isobars, weather features such as fronts, tropical cyclone, high and low centers, and observational data plotted with wind barbs. The 24 hour forecast track for low and high pressure center positions, and the strength of the forecast center are depicted on the charts. The product depicts hazardous marine conditions such as gale and storm warnings and tropical events.

For the Pacific Ocean, there are two charts prepared, with some overlap of coverage area along 170 degrees West. Coordination is done with the Tropical Prediction Center and the Central Pacific Hurricane Center to ensure the surface and tropical analyses are consistent and compatible.

The analyses are prepared using available numerical forecast guidance, in situ and remotely sensed observational surface data, and satellite imagery.

2. **Availability:**

The product is disseminated four times per day. The product is disseminated via the Internet, the Family of Services, and the U.S. Coast Guard Radiofax Broadcasts. Additional information on product dissemination is available at:

<http://weather.gov/om/marine/home.htm>.

The following Internet site is one location to access the Surface Analysis products:

<http://weather.noaa.gov/fax/marine.shtml>.

3. **Additional Information:**

A description of Marine and Coastal Services policy, areas of responsibility, abbreviations and definitions, standards and guidelines, and means of product dissemination for the Surface Forecast product is described in NWS Instructions 10-301, 10-303, 10-304, and 10-311, which are made available on the Internet at:

http://www.nws.noaa.gov/directives/010/operation_services.htm.